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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------------|-----------------------------|
| 10/598,909 | 09/14/2006 | Junkuan Wang | 112701-753 | 1906 |
| 29157 | 7590 | 09/26/2007 | | |
| BELL, BOYD & LLOYD LLP P.O. Box 1135 CHICAGO, IL 60690 | | | EXAMINER MI, QIUWEN | |
| | | | ART UNIT 1655 | PAPER NUMBER |
| | | | NOTIFICATION DATE 09/26/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

Office Action Summary

Application No.

10/598,909

Applicant(s)

WANG ET AL.

Examiner

Qiuwen Mi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 and 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-14, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/20/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-8, 12-14, 20, and 21, in the reply filed on 8//28/2007 is acknowledged.

Claims 9-11, 15-19 are withdrawn from further consideration as being drawn to nonelected inventions.

The arguments pertaining to the election of species were found persuasive and the requirement is hereby removed.

Claims Pending

Claims 1-21 are pending. Claims 9-11, 15-19 are withdrawn as they are directed toward non-elected invention groups. Claims 1-8, 12-14, 20, and 21 are examined on the merits.

Oath/Declaration Objections

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: One of the inventors did not sign the oath.

Claim Objections

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Claim 1 is objected to because of the following informalities: Claim 1 recites "a carrier selected from the group consisting of milk and milk protein-containing", and the sentence is grammatically incorrect. Appropriate correction is required.

Claim Rejections –35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 12-14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levinson (US 5,925, 394), in view of Chu et al (US 7,108,887), as evidenced by Borradaile et al (Biochemistry 42: 1283-1291, 2003)*, Lee et al (J. Agric. Food Chem. 50: 3988-3991, 2002)*, and Gorinstein et al (J. Agric. Food Chem. 54: 1887-1892, 2006)*.

Levinson teaches making food products (see Abstract) (thus oral) adding a milk (from cow, an animal) product into freshly squeezed grapefruit juice (citrus fruit) (a liquid form) (a dairy product, a milk product, a liquid drink, a solution/suspension) (col 18, lines 65-67; col 19, lines 1-5). It is inherent that the freshly squeezed grapefruit contains lipophilic bioactive components such as grapefruit oil, and hydrophilic bioactive components such as vitamin C and phenolic, and flavonoid (naringenin) (flavanone) compounds.

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As evidenced by Borradaile et al, naringenin is the principal flavonoid in grapefruit (see Abstract).

As evidenced by Lee et al, grapefruit contains carotenoid pigments carotene and lycopene (see Abstract).

As further evidenced by Gorinstein et al, grapefruit contains phenolic and ascorbic acid (vitamin C) (page 1889, left column, 3rd paragraph).

Levinson does not teach excluding insoluble fibers.

Chu et al disclose an invention that separates a citrus juice source into a permeate liquid and a retentate containing a large percentage of pulp and other solid present in the citrus juice source (thus insoluble fibers). Chu et al teach that citrus fruit is not particularly palatable or suitable for commercially distributed products (col 2, lines 30-35), especially grapefruit (col 2, lines 40-45). The invention reduces levels of less desirable components, including traditionally recognized bitterants such as naringin (col 1, lines 20-25), and provides an enhanced fruit juice supply (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to remove the insoluble fibers from grapefruit as taught by Chu et al since Chu et al teach that it reduces levels of less desirable components, including traditionally recognized bitterants such as naringin, and provides an enhanced fruit juice supply. Since both of

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the inventions yielded beneficial results in food industry, one of ordinary skill in the art would have been motivated to make the modifications.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

*This reference is cited merely to relay an intrinsic property and is not used in the basis for rejection *per se*.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qiuwen Mi

/Patricia Leith/
Patricia Leith
Primary Examiner
AU 1655